

IN THE CLAIMS:

Please cancel Claims 2-4, 23 and 24 without prejudice or waiver of their subject matter.

Please amend Claims 1, 5, and 6, as follows. Note that all claims currently pending in the application are being reproduced below for the Examiner's convenience.

1. (Currently Amended) A DC motor control method in a device which drives a mechanism by using a DC motor as a power source, comprising:

~~a step of discontinuously reducing a velocity command value of said motor within a deceleration region;~~

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function;

a determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said determination step.

Claims 2-4 (Cancelled).

5. (Currently Amended) A program product for realizing a DC motor control method in a device which drives a mechanism by using a DC motor as a power source, including program code for realizing:

~~program code for realizing a process for discontinuously reducing a velocity command value of said motor within a deceleration region:~~

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function;

a determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said determination step.

6. (Currently Amended) A storage medium storing a program for realizing a DC motor control method in a device which drives a mechanism by using a DC motor as a power source, storing program codes for realizing:

~~program code for realizing a process for discontinuously reducing a velocity command value of said motor within a deceleration region:~~

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function;

a determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said determination step.

7. (Previously Presented) A DC motor control apparatus in a device which drives a mechanism by using a DC motor as a power source, comprising:

first velocity command value generation means for generating a velocity command value to said motor in accordance with a first function;

second velocity command value generation means for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated by said first velocity command value generation means; and

change means for changing the velocity command value of said motor generated by said first velocity command value generation means to the velocity command value generated by said second velocity command value generation means, at predetermined timing within a deceleration region.

8. (Original) The DC motor control apparatus according to claim 7, wherein said change means changes the velocity command value to said motor when said mechanism arrives at a predetermined position.

9. (Previously Presented) The DC motor control apparatus according to claim 7, wherein said first function represents a curve profile, and said second function outputs a constant value.

10. (Original) The DC motor control apparatus according to claim 9, wherein said first function is a cubic function.

Claims 11-24 (Cancelled).

Please add Claims 25-27, as follows:

--25. (New) The DC motor control method according to claim 1, wherein said device is a printing apparatus and said mechanism is a conveyance mechanism for printing medium.

26. (New) The DC motor control apparatus according to claim 7, wherein said change means performs the changing a plurality of times so as to decrease the velocity command value.

27. (New) The DC motor control apparatus according to claim 7, wherein said device is a printing apparatus and said mechanism is a conveyance mechanism for a printing medium.--